

Translation

PATENT COOPERATION TREATY

PCT

INTERNATIONAL PRELIMINARY REPORT ON PATENTABILITY
(Chapter II of the Patent Cooperation Treaty)

(PCT Article 36 and Rule 70)

Applicant's or agent's file reference A 13653-PCT	FOR FURTHER ACTION	See Form PCT/IPEA/416
International application No. PCT/EP2004/003940	International filing date (day/month/year) 15.04.2004	Priority date (day/month/year) 14.07.2003
International Patent Classification (IPC) or national classification and IPC B28D1/18, E21C35/18, E01C23/088		
Applicant WIRTGEN GMBH		

1.	This report is the international preliminary examination report, established by this International Preliminary Examining Authority under Article 35 and transmitted to the applicant according to Article 36.
2.	This REPORT consists of a total of <u>7</u> sheets, including this cover sheet.
3.	This report is also accompanied by ANNEXES, comprising: a. <input checked="" type="checkbox"/> (sent to the applicant and to the International Bureau) a total of <u>6</u> sheets, as follows: <div style="margin-left: 20px;"><input type="checkbox"/> sheets of the description, claims and/or drawings which have been amended and are the basis for this report and/or sheets containing rectifications authorized by this Authority (see Rule 70.16 and Section 607 of the Administrative Instructions). <input checked="" type="checkbox"/> sheets which supersede earlier sheets, but which this Authority considers contain an amendment that goes beyond the disclosure in the international application as filed, as indicated in item 4 of Box No. I and the Supplemental Box. b. <input type="checkbox"/> (sent to the International Bureau only) a total of (indicate type and number of electronic carrier(s)) _____, containing a sequence listing and/or tables related thereto, in computer readable form only, as indicated in the Supplemental Box Relating to Sequence Listing (see Section 802 of the Administrative Instructions).</div>
4.	This report contains indications relating to the following items: <div style="margin-left: 20px;"><input checked="" type="checkbox"/> Box No. I Basis of the report <input type="checkbox"/> Box No. II Priority <input type="checkbox"/> Box No. III Non-establishment of opinion with regard to novelty, inventive step and industrial applicability <input type="checkbox"/> Box No. IV Lack of unity of invention <input checked="" type="checkbox"/> Box No. V Reasoned statement under Article 35(2) with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement <input type="checkbox"/> Box No. VI Certain documents cited <input type="checkbox"/> Box No. VII Certain defects in the international application <input type="checkbox"/> Box No. VIII Certain observations on the international application</div>

Date of submission of the demand	Date of completion of this report
Name and mailing address of the IPEA/EP	Authorized officer
Facsimile No.	Telephone No.

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Box No. I Basis of the report

1. With regard to the language, this report is based on the international application in the language in which it was filed, unless otherwise indicated under this item.
- ☐ This report is based on translations from the original language into the following language _____ which is the language of a translation furnished for the purposes of:
- ☐ international search (Rule 12.3 and 23.1(b))
- ☐ publication of the international application (Rule 12.4)
- ☐ international preliminary examination (Rule 55.2 and/or 55.3)
2. With regard to the elements of the international application, this report is based on *(replacement sheets which have been furnished to the receiving Office in response to an invitation under Article 14 are referred to in this report as "originally filed" and are not annexed to this report)*:
- ☐ the international application as originally filed/furnished
- ☒ the description:
- pages 1-11 as originally filed/furnished
- pages* _____ received by this Authority on _____
- pages* _____ received by this Authority on _____
- ☒ the claims:
- nos. _____ as originally filed/furnished
- nos.* _____ as amended (together with any statement) under Article 19
- nos.* 1-9 received by this Authority on 11.02.2005 with telefax
- nos.* _____ received by this Authority on _____
- ☒ the drawings:
- sheets 1/5-5/5 as originally filed/furnished
- sheets* _____ received by this Authority on _____
- sheets* _____ received by this Authority on _____
- ☐ a sequence listing and/or any related table(s) – see Supplemental Box Relating to Sequence Listing.
3. ☐ The amendments have resulted in the cancellation of:
- ☐ the description, pages _____
- ☐ the claims, nos. _____
- ☐ the drawings, sheets/figs _____
- ☐ the sequence listing (*specify*): _____
- ☐ any table(s) related to sequence listing (*specify*): _____
4. ☐ This report has been established as if (some of) the amendments annexed to this report and listed below had not been made, since they have been considered to go beyond the disclosure as filed, as indicated in the Supplemental Box (Rule 70.2(c)).
- ☐ the description, pages _____
- ☐ the claims, nos. _____
- ☐ the drawings, sheets/figs _____
- ☐ the sequence listing (*specify*): _____
- ☐ any table(s) related to sequence listing (*specify*): _____

* If item 4 applies, some or all of those sheets may be marked "superseded."

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Box No. V	Reasoned statement under Article 35(2) with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement		
1. Statement			
Novelty (N)	Claims	1, 3-19	YES
	Claims	2	NO
Inventive step (IS)	Claims		YES
	Claims	1-19	NO
Industrial applicability (IA)	Claims	1-19	YES
	Claims		NO
2. Citations and explanations (Rule 70.7)			
<p>1.1 The amendments filed with the fax of 11 February 2005 introduce substantive matter which goes beyond the original disclosure in the international application as filed, thereby contravening PCT Article 34(2)(b). This concerns independent claim 2.</p> <p>The original feature (in original claim 1) that "the milling cylinder (10) is associated with a tool changer" has been deleted from the present claim 2, thus broadening the choice of tool changers covered by this claim.</p>			
<p>1.2 In this international preliminary report, claim 2 is regarded as including this feature and thus as meeting the requirements of PCT Article 34(2)(b).</p>			
<p>2.1 The present application does not meet the requirements of PCT Article 33(1) because the claimed subject matter or the subject matter of claim 2 is not novel (PCT Article 33(2)).</p>			
<p>2.1.1 EP-A-1013829 (figure 3) discloses a construction</p>			

Box No. V	Reasoned statement under Article 35(2) with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement
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machine for working ground surfaces and having a milling cylinder and a plurality of cutter bit holders with exchangeable cutter bits.

Also disclosed are oscillating beaters (28) inside the milling cylinder.

2.1.2 It is further noted that the tool changer as per claim 2 does not comprise any technical features, and should only be suitable to:

- remove the cutter bits from the cutter bit holder and to mount them thereon;
- transmit a dynamic impulse to the milling cylinder, the impulse applying an ejection force to the cutter bit.

2.1.3 The arrangement disclosed in the above-mentioned prior art can, with the aid of the oscillating beater, take over these functions, at least in the alternative which concerns the cutter bit assembly, and hence the oscillating beater could also be regarded as a "tool changer". Moreover, that "tool changer" can also be considered to be "associated" with the milling cylinder. All the features of claim 2 are thus already disclosed.

2.2 The present application also fails to meet the requirements of PCT Article 33(1) because the subject matter of claim 1 does not involve an inventive step (PCT Article 33(3)).

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	<p>2.2.1 DE-A-3026930 (see figures 36-41) is regarded as the prior art closest to the subject matter of claim 1 and discloses (the references in parentheses are to that document) a construction machine for working ground surfaces (see page 17, lines 4-6) and comprising a milling cylinder (which can be inherently derived from figure 1) on the surface of which are arranged a plurality of cutter bit holders (200), a cutter bit (210) being exchangeably mounted in a cutter bit receptacle (211) in each cutter bit holder (200), and a tool changer (215) removing the cutter bits (210) from the cutter bit holders (200). Moreover, that tool changer can also be regarded as being "associated" with the milling cylinder.</p> <p>2.2.2 The subject matter of one of the alternatives (removal of the cutter bit) defined in claim 1 therefore differs from the known construction machine in that an adjustment device positions the milling cylinder or cutter bit relative to at least one tool changer and/or in that a control unit positions the at least one tool changer relative to the milling cylinder.</p> <p>The present invention can therefore be considered to address the problem of making it easier to remove the cutter big.</p> <p>2.2.3 The solution proposed in at least one of the alternatives (adjustment device) defined in claim 1 of the present application cannot be considered</p>

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inventive (PCT Article 33(3)).

At least the positioning of the milling cylinder by means of an adjustment device appears to be already known from EP-A-1167626 (see figure 1 and paragraph [0037]), for the same reasons, namely for making assembly operations easier. A person skilled in the art would thus consider it a conventional procedure to combine all the features defined in claim 1, at least as relates to this alternative. The other alternative (control unit) appears to relate to a conventional structural measure.

- 2.2.4 US-A-4329766 could also put into question the inventive input of the variant which concerns the cutter bit assembly; see figure 3, cutter bit holder (14), cutter bit receptacle (13), cutter bit (C), tool changer (35, T).
3. Dependent claims 3-19 do not contain any features which, in combination with the features of any claim to which they refer, meet the PCT novelty or inventive step requirements, in particular for the following reasons; see the citations and the corresponding passages cited in the search report:
- claims 3, 5, 8, 9, 11, 15: cf. DE-A-3026930, figure 39, tool changer (204), stop surface (206);
 - claim 4: cf. DE-A-3026930, figure 21 and page

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44, lines 30-34;

- claims 6, 13, 14: cf. EP-A-1167626, figure 1, adjustment unit/control unit [0035]-[0037];
- claims 7, 16, 17, design measure;
- claims 10, 12: cf. EP-A-1013829, vibrator (22), beetle (28);
- claims 18, 19: cf. US-A-5438860, figure 8, recognition system (10).

4. It should also be noted that, if the contribution of independent claims 1 and 2 over the prior art were broadened in an admissible manner and met the requirements of PCT Article 33(1), the claims would not be linked by a single inventive concept.